# Clusters of Young, Recently Infected Gay Men Driving Danish HIV Cases

November 21, 2012

A study of HIV transmission routes in Denmark has found that the epidemic's main driver is young gay men who are newly infected, and that people who test positive for HIV later in the course of their infection do not play a major role in spreading the virus, aidsmap reports. Danish investigators published their analysis of 1,515 new HIV diagnoses dating back to 2001 in the Journal of Acquired Immune Deficiency Syndromes. (The annual incidence of HIV in Denmark has long been stable at about 300.) Sorting the cases into transmission networks through the use of what's known as phylogenic analysis, researchers were able to identify specific clusters responsible for transmission routes.

The researchers delineated 46 transmission clusters involving 502 people, ranging between four and 82 people with a median of seven per cluster. Only one in five of those who tested late in the course of their HIV infection fell into such a cluster. Those involved in clusters had a higher average CD4 count of 402 than those outside of one, who averaged 287. Also, those inside a cluster had higher average viral loads, 63,000, compared with those outside of one, who averaged 25,000. Half of those with a primary HIV infection at diagnosis were in a cluster, compared with only 22 percent of those diagnosed late. Factors associated with infection through a larger cluster network were an age younger than 30, sex between men, injection drug use, higher CD4 count and primary infection at the time of a positive HIV test. Smaller clusters tended to be linked through heterosexual sex and made up of late testers.

The study authors said Danish HIV prevention programs should target younger gay men in particular, especially those who were recently infected. Efforts to identify people infected longer are more likely to benefit the individual person rather than curb the spread of the virus, the researchers believe.

To read the aidsmap report, click here.

For an abstract of the study,click here.